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EXAMINER

DANG, KHANH

ART UNIT PAPER NUMBER

2111

DATE MAILED: 11/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/933,846

Applicant(s)

VAN DE MEULENHOF ET AL.

Examiner

Khanh Dang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 and 3 is/are allowed.
- 6) ☒ Claim(s) 1 and 4-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

Claims 1 and 4-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 4-18 are directed to an apparatus. However, the essential structural cooperative relationship(s) between the so-called "status channel creation means," and "status transmitting means" have been omitted, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by

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another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 4-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Gibbs.

As broadly drafted and at best the Examiner can ascertain from the language of the claims, claims 1-11 do not define any structure that differs from Gibbs. With regard to claims 1 and 10, Gibbs discloses a communication system (10a/b/c) comprising a plurality of devices (30 a-f) interconnected via a bus (IEEE 1394 bus), the bus being capable of handling isochronous and asynchronous transmissions (see Gibbs, column 1, lines 57-63), wherein the communication system (10a/b/c) comprises a status manager having status channel creation means for creating on the bus an isochronous status channel and having status transmitting means for transmitting status information on the isochronous status channel (all IEEE 1394 device must strictly adhere to the requirements set forth in IEEE 1394 specification. It is also noted that according to IEEE 1394 specification and Applicant's own acknowledgement that IEEE 1394 nodes communicate via channels. In fact, in IEEE 1394, the isochronous resource manager is readable as the "status manager" including the so-called "status channel creation

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means” and “status transmitting means.” The isochronous resource manager monitors, among other things, the status of available bandwidth and notify the nodes of the remaining bandwidth status. Thus, it is clear that at least the available bandwidth information is readable as the so-called “status information.” As a matter of fact, the “stream manager” of Gibbs et al. is bandwidth resource manager. See the widely available IEEE 1394 specification or an overview of the IEEE 1394 from the documents cited in the previous Final Office Action. In particular, see IEEE 1394, page 2; and Fire on the Wire, pages 5-7 (cited in the previous Final Office Action). Another “overview” of IEEE 1394 regarding the use of “channels” states that “[i]sochronous transfers on the 1394 bus do not target a specific node. Isochronous transfers are broadcast transfers which use channel numbers to determine destination. Channel numbers are 6-bit values which means there are a maximum of  $2^6$  or 64 channels per bus. A single node on the 1394 bus acts as talker, or data deliverer, on a given channel at any one time. As many nodes on the bus as desired can act as listeners, or data receivers, on a given channel at any one time. The roles of talker and listener on a given channel are not fixed. A node acting as talker at one time on a given channel may subsequently initiate listen transfers on the same channel at some later time. The only restriction is that only one node can talk on a channel at a time. Channels are managed on the 1394 bus by a node acting as an isochronous resource manager.” Thus, it is clear that the status information such as available bandwidth must be transmitted via a “status” channel. **It is important to note that the word “status” refers to the “isochronous status” which is directly related to available bandwidth information needed for**

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**isochronous transactions in IEEE 1394. Claim 1 refers to “isochronous status” including the available bandwidth needed for isochronous transactions in IEEE 1394. The “channel” used for the “isochronous status” is not necessarily an isochronous channel.** With regard to claims 4 and 11, it is clear that all devices or nodes must be able to “read” the status broadcast. With regard to claim 5, according to the IEEE 1394 specification, the transmitting of status information can also be done over an asynchronous channel (see Applicants’ originally filed specification, page 2, lines 15-28). With regard to claim 6-8, according to the IEEE 1394 specification, the status information comprises information on the network topology, information on the capabilities of a device, and available bandwidth on the bus (see Applicants’ originally filed specification, page 2, lines 15-28). With regard to claim 9, the on/off status or the bandwidth status or the distance between nodes in the network is readable as the so-called “level of attachment.” Note also that nodes in IEEE1394 are “plug and play” nodes.

### ***Response to Arguments***

Applicants’ arguments filed 10/11/2005 have been fully considered but they are not persuasive.

At the outset, Applicants are reminded that claims subject to examination will be given their broadest reasonable interpretation consistent with the specification. *In re Morris*, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997). In fact, the “examiner has the duty of police claim language by giving it the broadest reasonable interpretation.” *Springs*

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*Window Fashions LP v. Novo Industries, L.P.*, 65 USPQ2d 1862, 1830, (Fed. Cir. 2003). Applicants are also reminded that claimed subject matter not the specification, is the measure of the invention. Disclosure contained in the specification cannot be read into the claims for the purpose of avoiding the prior art. *In re Sporck*, 55 CCPA 743, 386 F.2d, 155 USPQ 687 (1986).

With this in mind, the discussion will focus on how the terms and relationships thereof in the claims are met by the references. Response to any limitations that are not in the claims or any arguments that are irrelevant and/or do not relate to any specific claim language will not be warranted.

**The Drawings:**

**Applicants' amendment to the drawing overcomes the drawing objection.**

**The 112 Rejection:**

**The rejection of claims 2 and 3 under 35 USC 112, 2<sup>nd</sup> paragraph is withdrawn .**

With regard to the 112 rejection of claims 1, 4-18, the Examiner disagrees with Applicant's assessment of the MPEP 2172.01 in the amendment filed 10/11/2005.

Applicants argue that "[r]eferring to claim 1, a careful reading of the instant specification shows that whatever 'relationships' the final Office Action deems to be 'missing' in the above-described context are referred to somewhere in the specification in broad terms that dispel any notion that the relationship is critical or essential to the

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present invention.” In response to Applicants’ argument, it is irrelevant whether the “relationships ... are referred to somewhere in the specification in broad terms.” MPEP 2172.01 requires that relationships between elements recited in claims must be specified. Further, Applicants are requested to point out to the specification where in the specification that describes such “relationships” and the exact nature of the “means plus function” recited in claim 1.

Applicant also argues that “[a]s in the preceding MPEP passage under 2172.01, the term ‘essential’ cannot properly be ignored in interpreting the meaning of the passages. The latter passage refers to ‘essential . . . as defined by applicants in the specification.’ This latest MPEP passage is followed by guidance on some of the pitfalls to avoid in attempting to reject a claim for failure to recite essential matter. A careful reading of the specification dispels any notion that ‘essential’ subject matter has been omitted from the claims.” In response to Applicants’ argument, the following discussion will focus on key areas where the Examiner believes the Applicant misinterpreted the MPEP 2172.01. At the outset, MPEP 2172.01 is not about “essential subject matter [that] has been omitted from the claims.” Rather, MPEP requires interrelation and structural relationships between essential elements in the claims. It is still the Examiner’s position that, as defined in the originally filed specification, the so-called “status manager,” “creation means,” status transmission means,” “reception means,” “status reading means,” and “status sending means” are essential elements to the claimed invention. Since they are essential elements as defined by the originally filed specification, their structural cooperative relationships must be provided in the



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claims. If Applicant does not agree with the Examiner that the so-called "status manager," "creation means," status transmission means," "reception means," "status reading means," and "status sending means", as defined by the specification, are not essential elements to the claimed invention, Applicant is required to state on the record that this is the case.

Applicant's argument is irrelevant to the issue at question, which is an omission of essential structural cooperative relationships. Further, Applicant did not provide any evidence showing that the essential structural cooperative relationships are included in the claims. In any event, Applicant's attention is again directed to MPEP 2172.01 which clearly states that "a claim which fails to interrelate (emphasis added) essential elements of the invention as defined by applicant(s) in the specification may be rejected under 35 U.S.C. 112, second paragraph, for failure to point out and distinctly claim the invention. See *In re Venezia*, 530 F.2d 956, 189 USPQ 149 (CCPA 1976); *In re Collier*, 397 F.2d 1003, 158 USPQ 266 (CCPA 1968). It is clear that various recited elements function simultaneously, are directly functionally related, directly intercooperate, and/or serve independent purposes. In light from the guidance from MPEP 2172.01, it is clear that a claim may be rejected for failing to interrelate essential structural cooperative relationships if various recited elements, as disclosed, function simultaneously, are directly intercooperate, and/or serve independent purposes. In the instant case, the "elements," identified by the Examiner, function simultaneously, are directly functionally related, directly intercooperate, and/or serve independent purposes as evidenced from the originally filed specification. If Applicant disagrees, it is

requested that Applicant provides evidences showing that the identified elements do not function simultaneously, are not directly functionally related, not directly intercooperate, and/or not serve independent purposes; and states on the record that this is the case.

**The 102 Rejection:**

With regard to claims 1, 10, and 11, Applicant argues that “[t]he Office Action seemingly is citing to IEEE 1394 for the proposition that status information is broadcasted via channels.” At the outset, it is again noted that all IEEE 1394 device must strictly adhere to the requirements set forth in IEEE 1394 specification. It is also noted that according to IEEE 1394 specification and Applicant’s own acknowledgement that IEEE 1394 nodes communicate via channels. In fact, in IEEE 1394, the isochronous resource manager is readable as the “status manager” including the so-called “status channel creation means” and “status transmitting means.” The isochronous resource manager monitors, among other things, the status of available bandwidth and notify the nodes of the remaining bandwidth status. Thus, it is clear that at least the available bandwidth information is readable as the so-called “status information.” As a matter of fact, the “stream manager” of Gibbs et al. is bandwidth resource manager. See the widely available IEEE 1394 specification or an overview of the IEEE 1394 from the documents cited in the previous Final Office Action. In particular, see IEEE 1394, page 2; and Fire on the Wire, pages 5-7 (cited in the previous Final Office Action). Another “overview” of IEEE 1394 regarding the use of

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“channels” states that “[i]sochronous transfers on the 1394 bus do not target a specific node. Isochronous transfers are broadcast transfers which use channel numbers to determine destination. Channel numbers are 6-bit values which means there are a maximum of  $2^6$  or 64 channels per bus. A single node on the 1394 bus acts as talker, or data deliverer, on a given channel at any one time. As many nodes on the bus as desired can act as listeners, or data receivers, on a given channel at any one time. The roles of talker and listener on a given channel are not fixed. A node acting as talker at one time on a given channel may subsequently initiate listen transfers on the same channel at some later time. The only restriction is that only one node can talk on a channel at a time. Channels are managed on the 1394 bus by a node acting as an isochronous resource manager.” Thus, it is clear that the status information such as available bandwidth must be transmitted via a “status” channel. **It is important to note that the word “status” refers to the “isochronous status” which is directly related to available bandwidth information needed for isochronous transactions in IEEE 1394. Claim 1 refers to “isochronous status” including the available bandwidth needed for isochronous transactions in IEEE 1394. The “channel” used for the “isochronous status” is not necessarily an isochronous channel. it is never the Examiner’s position that Applicant’s claimed invention is disclosed in IEEE 1394 standard. As clearly stated on the record, it is the Examiner’s position that the claims at question are drafted so broadly that they are readable right on the specification of IEEE 1394.** Applicant also argues that “[I]n the ‘Response to Arguments’ section, page 6, the final Office Action suggests that the isochronous

resource manager (111M) of IEEE 1394 constitutes disclosure of claim 1 of the present invention. As support for this proposition, the Office Action reiterates that ‘the isochronous resource manager monitors, among other things, the status of available bandwidth and notify the nodes of the remaining bandwidth status. Thus, it is clear that the available bandwidth information is readable as the so-called ‘isochronous status channel.’ However, the available bandwidth is notified by asynchronous messages [commonly known as asynchronous channels] ..., not by an isochronous channel.” In response to Applicants’ argument, **it is important to note that the word “status” refers to the “isochronous status” which is directly related to available bandwidth information needed for isochronous transactions in IEEE 1394. Claim 1 refers to “isochronous status” including the available bandwidth needed for isochronous transactions in IEEE 1394. The “channel” used for the “isochronous status” is not necessarily an isochronous channel.** Applicants further argue that “the Office Action fails to suggest that the IRM is a “status manager” which language explicitly appears in claim 1.” In response to Applicant’s argument, Applicant is again invited to review at least the IEEE 1394, page 2; and Fire on the Wire, pages 5-7, cited in the previous Final Office Action. In the “Fire on the Wire,” the isochronous resource manager assigns a channel number to nodes that request information on the available bandwidth (or the so-called status information). Thus, the so-called “status channel” is created. It is also clear that managing bandwidth status requires a bandwidth status manager. Further, as explained above, according to IEEE 1394 specification and Applicant’s own acknowledgement that IEEE 1394 nodes communicate via channels,

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and at least the available bandwidth information is readable as the so-called "status information." Therefore, the isochronous status is transmitted via channel. Applicants

also argue that "isochronous has distinct meaning from that of asynchronous.

Accordingly, the transmitting of status information over an asynchronous channel, i.e., in the conventional manner (see present specification, page 2, lines 20-28), even in the event that the isochronous resource manager does the transmitting of the particular status, cannot fairly be characterized as implying that the isochronous resource manager is 'transmitting status information on the isochronous status channel.'" **It is important to note that the word "status" refers to the "isochronous status" which is directly related to available bandwidth information needed for isochronous transactions in IEEE 1394. Claim 1 refers to "isochronous status" including the available bandwidth needed for isochronous transactions in IEEE 1394. As claimed, the "channel" used for the "isochronous status" is not necessarily an isochronous channel.**

#### ***Allowable Subject Matter***

Claims 2 and 3 are allowed.

Claim 18 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

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Claims 12-17 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

US Patent No. 6,820,150 to Joy et al. is cited as relevant art.

Any inquiry concerning this communication should be directed to Khanh Dang at telephone number 571-272-3626.



Khanh Dang  
Primary Examiner